





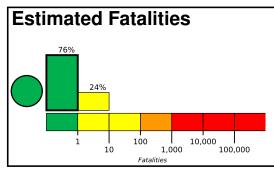
PAGER Version 1

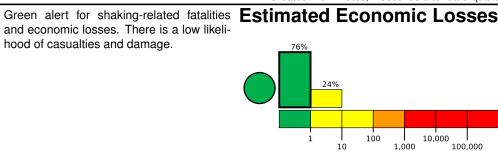
Created: 20 minutes, 7 seconds after earthquake

USD (Millions)

M 5.4, 89km NE of Hihifo, Tonga

Origin Time: 2019-09-13 22:53:31 UTC (Fri 10:53:31 local) Location: 15.3761° S 173.1631° W Depth: 10.0 km





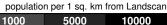
Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) | | _* | 1k* | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|--------------------------|----------|--------|-------|----------|----------|-------------|------------|----------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY | | I | 11-111 | IV | V | VI | VII | VIII | IX | X+ |
| PERCEIVED SHAKING | | Not felt | Weak | Light | Moderate | Strong | Very Strong | Severe | Violent | Extreme |
| POTENTIAL DAMAGE | Resistant Structures | None | None | None | V. Light | Light | Moderate | Mod./Heavy | Heavy | V. Heavy |
| | Vulnerable Structures | None | None | None | Light | Moderate | Mod./Heavy | Heavy | V. Heavy | V. Heavy |

^{*}Estimated exposure only includes population within the map area.

Population Exposure

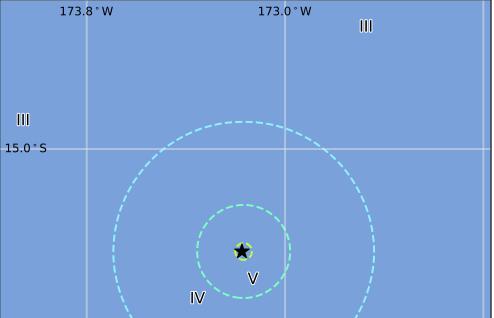
15.8°S



10000



There are likely to be no affected structures in this



Historical Earthquakes

| | - | | |
|-------|-----------------------------|--------------------|--|
| Dist. | Mag. | Max | Shaking |
| (km) | | MMI(#) | Deaths |
| 307 | 7.2 | IV(19k) | _ |
| 356 | 5.9 | VII(15k) | _ |
| 183 | 6.9 | IV(197k) | 0 |
| | (km) 307 356 | 307 7.2 356 5.9 | (km) MMI(#) 307 7.2 IV(19k) 356 5.9 VII(15k) |

Selected City Exposure

from GeoNames.org

| MMI | City | Population |
|-----|--------|------------|
| III | Hihifo | 1k |

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.